

IN THE CLAIMS

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strike through~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND, CANCEL and ADD claims in accordance with the following:

1. (cancelled)
2. (currently amended) The program product according to ~~claim 1~~claim 19, wherein the first and second clients are implemented on a single computer platform.
3. (currently amended) The program product according to ~~claim 1~~claim 19, wherein: the second delivery request contains search conditions for the log memory; and said log record retrieving ~~step (d)~~ retrieves log records that match with the search conditions specified by the second client.
4. (currently amended) The program product according to ~~claim 1~~claim 19, wherein: the second delivery request from the second client requests delivery of a message log record; and
in response to the second delivery request for the message log record, said log record retrieving ~~step (d)~~ retrieves a log record and sends inquiry-related part of the retrieved log record to the second client.
5. (currently amended) The program product according to ~~claim 1~~claim 19, wherein: the second delivery request from the second client requests delivery of a reply log record; and
in response to the second delivery request for the reply log record, said log record retrieving ~~step (d)~~ retrieves a log record and sends reply-related part of the retrieved log record

to the second client.

6. (currently amended) The program product according to ~~claim 5~~claim 19, wherein: the second delivery request from the second client requests delivery of a reply log record associated with a particular inquiry; and

said log record retrieving ~~step (d)~~-retrieves log records that match with the particular inquiry specified in the second delivery request and sends reply-related part of the retrieved log records to the second client.

7. (currently amended) The program product according to ~~claim 1~~claim 18, wherein the ~~inquiries~~pending inquiry sent at said inquiry sending ~~step (b)~~-include a list of possible answers to ~~one of the inquiries~~pending inquiry.

8. (Cancelled)

9. (currently amended) The program product according to ~~claim 1~~claim 18, further comprising ~~the step of~~-notifying the service process of cancellation of the pending inquiry if there is no reply to the pending inquiry within a specified timeout period.

10. (currently amended) The program product according to claim 9, wherein: the timeout period is specified in the pending inquiry sent at said pending inquiry sending ~~step (b)~~; and

said notifying ~~step~~-notifies the service process of cancellation when expiration time of the pending inquiry is reached, the expiration time being calculated by adding the specified timeout period to issuance time of the pending inquiry.

11. (currently amended) The program product according to claim 10, wherein: the timeout period is indirectly specified by a timeout period identifier of the pending inquiry; and

said notifying ~~step~~-calculates the expiration time with reference to a predefined timeout period table that associates a plurality of timeout period identifiers with corresponding timeout periods.

12. (currently amended) The program product according to ~~claim 1~~claim 18, further comprising ~~the step of~~ dispatching a command upon receipt of the reply to the pending inquiry, wherein the command is previously associated with the pending inquiry so as to initiate a particular processing task related thereto.

13. (currently amended) The program product according to claim 12, wherein said command dispatching ~~step~~ adds the received reply as a parameter of the command to be dispatched.

14. (currently amended) A method that helps service processes receive instructions from an operator, the method comprising ~~the steps of~~:

(a)—upon issuance of an inquiry from a service process to the operator, storing the inquiry as a pending inquiry in an inquiry buffer;

(b)—in response to a first delivery request from a first client to deliver an inquiry to the first client, retrieving the pending inquiry ~~pending in~~ corresponding to the first delivery request from the inquiry buffer and sending the retrieved pending inquiry to the first client over a network;

(c)—upon receipt of a reply from the first client, forwarding the received reply to the service process, as well as storing the received reply and the corresponding pending inquiry as a log record in a log memory; and

when a subject of the pending inquiry corresponding to the first delivery request is similar to a subject of a past inquiry, retrieving from the log memory a log record corresponding to the past inquiry, and sending to the first client the retrieved log record corresponding to the past inquiry together with the pending inquiry corresponding to the first delivery request(d)—in response to a second delivery request from a second client on the network, consulting the log memory to retrieve log records of past replies that were made to inquiries about the same subject as a new pending inquiry stored in the inquiry buffer for delivery to the second client; and

(e)—~~sending the second client the retrieved log records of past replies, together with the new pending inquiry directed to the second client.~~

15. (currently amended) An apparatus that helps service processes receive instructions from an operator, comprising:

an inquiry buffer that stores inquiries;
a log memory that stores records of past inquiries and corresponding replies;
an inquiry receiver that receives an inquiry from the service processes and stores the received inquiry as a pending inquiry in said inquiry buffer;

an inquiry message sender, responsive to a first delivery request from a first client to deliver an inquiry to the first client, ~~which retrieves the inquiry~~ retrieving the pending inquiry corresponding to the first delivery request from in said inquiry buffer and ~~sends~~ sending the retrieved pending inquiry to the first client over a network; ~~and~~

a reply message receiver, responsive to a reply received from the first client, ~~which forwards~~ forwarding the received reply to the service process, as well as storing the received reply and ~~the~~ corresponding pending inquiry as a log record in said log ~~memory; and~~ memory, wherein the inquiry message sender when a subject of the pending inquiry corresponding to the first delivery request is similar to a subject of a past inquiry, retrieving from the log memory a log record corresponding to the past inquiry, and sending to the first client the retrieved log record corresponding to the past inquiry together with the pending inquiry corresponding to the first delivery request a log record sender, responsive to a second delivery request from a second client on the network, which consults the log memory to retrieve log records of past replies that were made to inquiries about the same subject as a new pending inquiry stored in the inquiry buffer for delivery to the second client and ~~sends the second client the retrieved log records of past replies, together with the new pending inquiry directed to the second client.~~

16. (currently amended) A computer-readable storage medium storing a program that helps service processes receive instructions from an operator, the program causing a computer system to perform a ~~process~~ operations comprising the steps of:

(a)—upon issuance of an inquiry from a service process to the operator, storing the inquiry as a pending inquiry in an inquiry buffer;

(b)—in response to a first delivery request from a first client to deliver an inquiry to the first client, retrieving the pending inquiry ~~pending in~~ corresponding to the first delivery request from the inquiry buffer and sending the retrieved pending inquiry to the first client over a network;

(c)—upon receipt of a reply from the first client, forwarding the received reply to the ~~service~~ service process, as well as storing the received reply and ~~the~~ corresponding pending inquiry as a log record in a log ~~memory; and~~ memory.

wherein when a subject of the pending inquiry corresponding to the first delivery request is similar to a subject of a past inquiry, retrieving from the log memory a log record corresponding to the past inquiry, and sending to the first client the retrieved log record corresponding to the past inquiry together with the pending inquiry corresponding to the first delivery request

~~(d) — in response to a second delivery request from a second client on the network, consulting the log memory to retrieve log records of past replies that were made to inquiries about the same subject as a new pending inquiry stored in the inquiry buffer for delivery to the second client; and~~

~~(e) — sending the second client the retrieved log records of past replies, together with the new pending inquiry directed to the second client.~~

17. (cancelled)

18. (NEW) A program product that helps service processes receive instructions from an operator, the program product causing a computer system to perform operations comprising: upon issuance of an inquiry from a service process, storing the inquiry as a pending inquiry in an inquiry buffer;

in response to a first delivery request from a first client to deliver an inquiry to the first client, retrieving the pending inquiry corresponding to the first delivery request from the inquiry buffer, and sending the retrieved pending inquiry to the first client over a network;

upon receipt of a reply to the pending inquiry from the first client, forwarding the reply received from the first client to the service process, and storing the received reply and the corresponding pending inquiry as a log record in a log memory; and

when a subject of the pending inquiry corresponding to the first delivery request is similar to a subject of a past inquiry, retrieving from the log memory a log record corresponding to the past inquiry, and sending to the first client the retrieved log record corresponding to the past inquiry together with the pending inquiry corresponding to the first delivery request.

19. (New) The program product according to claim 18, wherein the operations further comprise:

in response to a second delivery request from a second client to deliver log records to the second client, retrieving log records from the log memory, and sending the retrieved log

records to the second client on the network.

20. (New) An apparatus that helps service processes receive instructions from an operator, comprising:

an inquiry buffer storing pending inquiries;

a log memory storing records of past inquiries and corresponding replies;

inquiry receiving means for receiving an inquiry from the service process and storing the received inquiry as a pending inquiry in the inquiry buffer;

inquiry message sending means for responsive to a first delivery request from a first client, retrieving the pending inquiry corresponding to the first delivery request from the inquiry buffer and sending the retrieved pending inquiry to the first client over a network; and

reply message receiving means for responsive to a reply received from the first client, forwarding the received reply to the service process and storing the received reply and the corresponding pending inquiry as a log record in the log memory;

wherein the inquiry sending message means, when a subject of pending inquiry corresponding to the first delivery request is similar to a subject of a past inquiry, retrieving from the log memory a log record corresponding to the past inquiry, and sending to the first client the retrieved log record corresponding to the past inquiry together with the pending inquiry corresponding to the first delivery request.

21. (New) The apparatus according to claim 20, further comprising:

log record sending means for responsive to a second delivery request to deliver log records from a second client on the network, retrieving log records from the log memory and sending the retrieved log records to the second client.